# Acromegaly clinical features

Patients with acromegaly often complain of headaches and fatigue.

# Hypertension

Is present in approximately 30% of cases, presumably attributable to volume overload and structural changes in the vascular system.

Because hypertension often persists after successful treatment of acromegaly, other mechanisms, such as essential hypertension, may be present in such patients.

Hypertension may lead to cardiac hypertrophy, although there are characteristic cardiac changes that are the result of a more specific form of acromegalic cardiomyopathy <sup>1</sup>).

# **Cardiac disease**

Usually begins with a hyperkinetic syndrome characterized by increased heart rate. Left ventricular (LV) function is usually preserved in young patients with a brief duration of disease, although LV mass may be increased and LV function in response to exercise may be reduced. Diastolic dysfunction is prevalent in patients with acromegaly. The degree of cardiomyopathy correlates with the duration of disease. Overt heart failure may occur in advanced disease if hormone excess is left untreated. Successful reduction in serum GH and IGF-I concentrations can lead to reduction in cardiac mass and improvement in LV function<sup>2)</sup>.

The high prevalence of hypertension and diabetes mellitus in association with acromegaly contributes to progression of coronary artery disease.

### Sleep apnea

Sleep apnea syndrome is present in most patients with acromegaly; it is detected in up to 90% of patients with symptoms such as snoring.

Airway stenosis and pharyngeal tissue hypertrophy are typical characteristics of changes in the structure of the upper respiratory tract in patients with acromegaly who present with OSAHS. AHI is a predictor of the severity of the respiratory tract changes <sup>3)</sup>.

# **Musculoskeletal complications**

Include enlargement of the synovial tissue and cartilage, causing hypertrophic arthropathy, primarily of the weight-bearing joints, can lead to degenerative changes and the need for surgical replacement of joints. Recently, investigators showed that joint improvement may be achieved after 12 months of

medical therapy, although joint thickening was not completely reversed <sup>4</sup>).

Acromegaly may produce the following signs and symptoms, which can vary from one person to another:

Enlarged hands and feet

Coarsened, enlarged facial features

Coarse, oily, thickened skin

Excessive sweating and body odor

Small outgrowths of skin tissue (skin tags)

Fatigue and muscle weakness

A deepened, husky voice due to enlarged vocal cords and sinuses

Severe snoring due to obstruction of the upper airway

Impaired vision

Headaches

Enlarged tongue

Pain and limited joint mobility

Menstrual cycle irregularities in women

#### Erectile dysfunction:

A study showed that ED is prevalent in male acromegalic patients and may be associated with systemic endothelial dysfunction induced by excessive GH. Further studies investigating the mechanism of GH and ED are required <sup>5)</sup>.

Enlarged liver, heart, kidneys, spleen and other organs

Increased chest size (barrel chest)

Evidence-based approach consensus recommendations address important clinical issues regarding multidisciplinary management of acromegaly-related cardiovascular, endocrine, metabolic, and oncologic comorbidities, sleep apnea, and bone and joint disorders and their sequelae, as well as their effects on quality of life and mortality <sup>6</sup>.

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